Preliminary Amendments
Application No.
Attorney's Docket No. 022702-148
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AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1-17. (Canceled)

- 18. (New) A single-component polyorganosiloxane (POS) composition which is stable on storage in the absence of moisture and which crosslinks in the presence of water into an elastomer, which composition comprises at least one crosslinkable linear polyorganopolysiloxane POS, an inorganic filler and a crosslinking catalyst, wherein the POS contains non-hydroxylated functionalized endgroups, and said composition being essentially devoid of hydroxylated POSs and said catalyst comprising a vanadium compound.
 - 19. (New) The POS composition as defined by Claim 18, comprising:
 - (A) at least one crosslinkable linear polyorganopolysiloxane A of formula:

$$(R^{2})_{a}[R^{fo}]_{3-a}Si-O \longrightarrow Si-O \longrightarrow Si(R^{2})_{a}[R^{fo}]_{3-a}$$

$$(A)$$

in which:

the substituents R¹, which may be identical or different, are each a saturated or unsaturated, substituted or unsubstituted, aliphatic, cyclanic or aromatic, C₁ to C₁₃ monovalent hydrocarbon radical;

the substituents R^2 , which may be identical or different, are each a saturated or unsaturated, substituted or unsubstituted, aliphatic, cyclanic or aromatic, C_1 to C_{13} monovalent hydrocarbon radical;

the functionalization substituents R^{fo}, which may be identical or different, each represent:

• an oxime residue of formula:

$$(R^3)_2 C = N - O - O$$

with R^3 independently representing a linear or branched C_1 to C_8 alkyl radical, a C_3 to C_8 cycloalkyl radical or a C_2 - C_8 alkenyl radical;

• an alkoxy residue of formula:

with R^4 independently representing a linear or branched C_1 to C_8 alkyl radical or a C_3 to C_8 cycloalkyl radical and $\underline{b} = 0$ or 1;

an acyl residue of formula:

with R⁵ representing a saturated or unsaturated, branched or unbranched, substituted or unsubstituted, aliphatic, cyclanic or aromatic, C₁ to C₁₃ monovalent hydrocarbon radical;

an enoxy residue of formula:

with the R⁶ groups, which may be identical or different, each representing hydrogen or a saturated or unsaturated, branched or unbranched, substituted or unsubstituted, aliphatic, cyclanic or aromatic, C₁ to C₁₃ monovalent hydrocarbon radical;

n has a value sufficient to confer, on the POS A, a dynamic viscosity at 25°C ranging from 1,000 to 1,000,000 mPa s;

a is zero or 1;

- (B) optionally, at least one polyorganosiloxane resin B functionalized by at least one radical R^{fo} as defined above and having in its structure, at least two different siloxyl units selected from among those of formulae (R¹)₃SiO_{1/2} (M unit), (R¹)₂SiO_{2/2} (D unit), R¹SiO_{3/2} (T unit) and SiO₂ (Q unit), at least one of these units being a T or Q unit, the radicals R¹, which may be identical or different, are as defined above with respect to the formula (A) and said resin having a content by weight of functional radicals R^{fo} ranging from 0.1 to 10%, with the proviso that a portion of the radicals R¹ are radicals R^{fo};
 - (C) optionally, at least one crosslinking agent C of formula:

$$(R^2)_a Si[R^{fo}]_{4-a}$$

with R², R^{fo} and <u>a</u> being as defined above;

(D) optionally, at least one linear polydiorganosiloxane D which is unreactive and which is not functionalized with R^{fo}, of formula:

$$(R^{1})_{3}SiO \longrightarrow \begin{bmatrix} R^{1} \\ Si - O \end{bmatrix} Si(R^{1})_{3} \qquad (D)$$

in which:

the substituents R¹, which may be identical or different, are as defined above for the polyorganosiloxane A of formula (A);

m has a value sufficient to confer, on the polymer of formula (D), a dynamic viscosity at 25°C ranging from 10 to 200,000 mPa·s;

- (E) an effective amount of a vanadium compound E as crosslinking catalyst or accelerator;
 - (F) an inorganic filler F;
 - (H) optionally, at least one auxiliary agent H.
- 20. (New) The POS composition as defined by Claim 19, wherein the compound E is a compound of vanadium in the 5 oxidation state of formula (E_1): X_3VO , in which the radicals X, which may be identical or different, are selected from the group consisting of 1-electron radical ligands X, alkoxy radicals, halogen atoms, 3-electron radical ligands LX, and ligands derived from acetylacetone, from a β -keto

ester, from a malonic ester, from an allyl compound, from a carbamate, from a dithiocarbamate or from a carboxylic acid.

- 21. (New) The POS composition as defined by Claim 20, wherein the vanadium compound is [(CH₃)₂CHO]₃VO, (CH₃CH₂O)₃VO, [(CH₃)₃CO]₃VO, [(CH₃CH₂O)(CH₃CH₂O)(CH₃CH₂O)(CH₃CH₂O)(CH₃CH₂O)(CH₃CH₂O)(CH₃CH₂O)(CH₃CH₂O)(CH₃CH₂O)(CH₃CH₂O)(CH₃CH₂O)(CH₃CH₂O)(CH₃CH₂O)(CH₃CH₂O)(CH₃CH₂O)(CH₃CH₃CO)(CH₃CH₂O)(CH₃CH₃CO)(CH₃CO)(C
- 22. (New) The POS composition as defined by Claim 19, wherein the compound E is a compound of vanadium in the 4 oxidation state of formula (E₂): X₂VO, in which the radicals X, which may be identical or different, are selected from the group consisting of 1-electron radical ligands X, alkoxy radicals, halogen atoms, 3-electron radical ligands LX, and ligands derived from acetylacetone, from a β-keto ester, from a malonic ester, from an allyl compound, from a carbamate, from a dithiocarbamate or from a carboxylic acid.
- 23. (New) The POS composition as defined by Claim 22, wherein the vanadium compound is VOCl₂, [(CH₃)₂CHO]₂VO, (CH₃CH₂O)₂VO, [(CH₃)₃CO]₂VO, [(CH₃CH₂O)₂VO or [(CH₃)₂(CH₂)CHO]₂VO.
- 24. (New) The POS composition as defined by Claims 20 or 22, wherein the formula (E_1) or (E_2) comprises an OR group in which R is a linear or branched C_1 - C_{13} alkyl radical or a C_3 - C_8 cycloalkyl radical.

- 25. (New) The POS composition as defined by Claim 19, wherein the compound E is a compound of vanadium in the 4 oxidation state of formula (E₃): VX₄, in which the X groups, which may be identical or different, are each a halogen atom, or an alkoxy radical OR with R representing a linear or branched C₁-C₁₃ alkyl radical or a C₃-C₈ cycloalkyl radical.
- 26. (New) The POS composition as defined by Claim 25, wherein the vanadium compound is [(CH₃)₂CHO]₄V, (CH₃O)₄V, (CH₃CH₂O)₄V, [(CH₃)₃CO]₄V, [(CH₃CH₂)(CH₃)CHO]₄V or [(CH₃)₂(CH₂)CHO]₄V.
- 27. (New) The POS composition as defined by Claim 19, wherein the compound E is a compound of vanadium in the 3 oxidation state of formula (E₄): XVO, in which the radical X is a 3-electron radical ligand LX, including a ligand derived from acetylacetone, from a β-keto ester, from a malonic ester, from an allyl compound, from a carbamate, from a dithiocarbamate or from a carboxylic acid.
- 28. (New) The POS composition as defined by Claim 20, wherein the formula (E₁), the 3-electron radical ligands LX are selected from among the acetylacetonato (CH₃COCHCOCH₃) and allyl (CH₂=CH-CH₂) radicals.
- 29. (New) The POS composition as defined by Claim 19, wherein the compound E is a compound of variation in the 5 oxidation state comprising 5-electron radical ligands L₂X, dienyl ligands, or cyclopentadienyl ligands.

- 30. (New) The POS composition as defined by Claim 19, comprising from 0.1 to 10 parts by weight of crosslinking/curing catalyst E.
- 31. (New) The POS composition as defined by Claim 19, wherein the functionalization substituents R^{fo} are alkoxy radicals of formula $R^4O(CH_2CH_2O)_{b^-}$, in which R^4 is a linear or branched C_1 to C_8 alkyl radical or a C_3 to C_8 cycloalkyl radical and $\underline{b} = 0$ or 1.
- 32. (New) The POS composition as defined by Claim 19, wherein the substituents R¹ of the polymers POS A functionalized by Rfo, of the resins B functionalized by Rfo and of the optional non-functionalized and unreactive polymers D are selected from the group consisting of:

alkyl and haloalkyl radicals having from 1 to 13 carbon atoms, cycloalkyl and halocycloalkyl radicals having from 5 to 13 carbon atoms,

alkenyl radicals having from 2 to 8 carbon atoms,

mononuclear aryl and haloaryl radicals having from 6 to 13 carbon atoms, and

cyanoalkyl radicals, the alkyl members of which have from 2 to 3 carbon atoms.

33. (New) An elastomer capable of adhering to various substrates and obtained by crosslinking and curing the POS composition as defined by Claim 18.